Of the external characters of B. b. frosti I am able to say

nothing.

It will thus be seen that the Museum is indebted to Mr. Frost for a donation of very great scientific value, as series of such skulls are very rarely obtained, and this one represents both a verification of the Tali Aboe locality and the discovery of a new subspecies.

With regard to references that have been made to "domesticated or semi-domesticated" Babirussas, Mr. Frost states that, at least in Buru and Tali Aboe, these animals are never domesticated, as they will not live in harmony with the native

pigs, which are ubiquitous.

He also says that the reason it is so difficult to obtain females is that the boars put up such a plucky fight against the dogs used in hunting that it is impossible to get at the sows until such time as the male has been killed, thus enabling the females to get safely away. As a result, very few museums possess female specimens, and our own collection only contains one single immature skull of that sex.

XXV.—A Further Collection of Mammals from Jujuy. By Oldfield Thomas.

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During the winter of 1919—April to August—Sr. E. Budin made collections of mammals on the lower grounds of Jujuy, firstly in the near neighbourhood of the town of Jujuy, at an altitude of rather more than 1200 metres, and then on the still lower levels to the east, where the Rio Lavallen, lower down (northwards) called the Rio San Francisco, forms part of the upper waters of the Vermejo system. On this river the place where Sr. Budin collected was Villa Carolina, some 20 kilometres to the east of San Pedro de Jujuy, and therefore in the same faunal district as Manoel Elordi and Tartagal, where he had previously found such interesting things.

A few additional specimens were obtained at Yuto, about

70 km. north of Villa Carolina.

The present collection adds considerably to our knowledge of the Jujuy fauna, and contains examples of four new forms, of which the most noticeable is a Marmosa of a more northern type than any previously recorded from Argentina.

1. Eptesicus hilairei, Geoff.

3. Yuto, Rio San Francisco (in spirit). Forearm 44 mm.

2. Myotis nigricans, Wied.

3. Yuto, Rio San Francisco (in spirit). Forearm 33 mm.

3. Molossops temminckii, Burm.

3. Yuto, Rio San Francisco (in spirit). Forearm 30 mm.

This bat is the type of the genus Molossops, as selected and

fixed by Miller *.

But it appears to me that the other species hitherto included in Molossops ought to be generically distinguished from it. For while in that genus, as represented by temminckii, there are only two lower incisors, m3 is comparatively normal, of triangular shape, with a well-marked third commissure, and m_3 , in correlation, has a normal triangular posterior lobe, with two cusps, the other species all differ in these respects. I would therefore suggest they should be distinguished under the following name:—

CYNOMOPS, gen. nov.

Genotype, C. cerastes † [Molossus cerastes, Thos.].

General characters as in Molossops, with the following

exceptions :-

Lower incisors 4. M3 simplified t, with no third commissure, the tooth transversely oblong, scarcely broader externally than internally. M3 equally simplified, the posterior lobe linear, with one cusp only.

Other species: C. planirostris, Pet., brachymeles, Pet., mastivus, Thos., and paranus, Thos. Molossops milleri, Osg., also presumably comes here, as it is compared with planirostris, but it is of about the size of M. temminckii, which is

* Fam. Gen. Bats, p. 247 (1907).

† I should naturally have selected planirostris as genotype, but specimens from so many localities (including Buenos Ayres) have been assigned to that species that there is always a little doubt about its exact identity. Moreover, the large cerastes contrasts better than planirostris with the little temminckii as a representative of the genus which contains all the large species of the group.

† Peters's beautiful plate of planirostris (Chiropt. Mus. Zool. Berl. pl. 18 B) shows the structure of the molars very well.

not mentioned, and the characters of the incisors and molars are not referred to.

4. Felis yaguarondi, Desm.

2. 669. Villa Carolina. 500 m.

A fine fully adult female of the normal grey-brown colour. This is a valuable accession, as the Museum collection of these variable cats is very imperfect and much needs supplementing. I have long had an impression that the Jaguarondi and the Eyra may possibly represent but a single dimorphic species, as there seems little essential difference, other than colour, between the grey or brown "F. yaguarondi" and the bright reddish "F. eyra," and the two occur more or less throughout the same area. So far, however, every author has considered them distinct—as, indeed, they appear,—and without better material I do not like definitely to assert their identity.

5. Mus musculus, L.

d. 547, 548, 556. Jujuy. 1258 m.

6. Holochilus baluearum, Thos.

3. 615, 622, 623, 626, 627, 675, 687, 692, 695, 699; Q. 610, 618, 621, 628, 629, 637, 638, 645, 561, 654, 655, 671, 674, 676, 677, 684. Villa Carolina. Alt. 500 m.

"Raton Nutria. Inhabits the banks of the river."—E. B. I provisionally use for this "otter-rat" the name I gave in 1906 to one sent from Tucuman by Signor Dinelli. But in this genus the local differences are so slight and inconstant, and the ranges of these animals are probably, as in other river-animals, so great, that it is doubtful if even the few species that have been described are all valid.

7. Hesperomys venustus, Thos.

3. 572, 582, 587, 597; ♀. 601. Jujuy. 1258 m.

д. 619, 630, 634, 646, 647, 649, 653, 682, 686; ç. 611, 633, 641, 642, 652, 656, 659, 678, 679, 688, 698, 707, 709, 711. Villa Carolina. 500 m.

8. Hesperomys musculinus cortensis, subsp. n.

3. 546, 564, 567, 577, 578, 598, 602; ♀. 553, 573, 579, 586, 599, 600, 604, 607. Jujny. 1258 m. "Caught in straw-yard."—E. B.

Size rather less than in true musculinus of Maimara, fect and tail averaging shorter. Colour above slightly duller, browner, and less clear, and below, where the difference is more noticeable, the tone is a dull pale drabby, approaching (though much less than) that found in Mus musculus, while in true musculinus the colour is a clear greyish white, with scarcely any saspicion of drabbiness.

Dimensions of the type:

Head and body 94 mm.; tail 83; hind foot 19; car 15.

Skull: greatest length 24.5; condylo-incisive length 22.3; zygomatic breadth 13.4; nasals 9; interorbital breadth 3.8; palatilar length 10; palatal foramina 5.6; dental length 11; upper molar series 3.5.

Hab. as above.

Type. Adult male. B.M. no. 20. 1. 7. 46. Original

number 577. Collected 29th April, 1919.

This laucha is no doubt very closely allied to the true musculinus * of Maimara, with which it shares the number of fourteen mammæ; but on comparison of fifteen specimens with six of musculinus it proves to have so uniformly drabbier an under surface, while both feet and tail average shorter, that I have thought it worthy of having a distinctive name.

A single old male skull—one of those overgrown examples which often render distinction by size so difficult—measures no less than 26 mm. in greatest length; but this is obviously

abnormal, the type being of about the usual adult size.

9. Oryzomys sp., flavescens group.

3. 613, 614, 655, 663, 680; \$\chi\$. 624, 636, 639, 640, 648. Villa Carolina. 500 m.

10. Graomys lockwoodi, Thos.

3. 625, 631, 668, 681, 685, 694, 697; \$\chi\$. 616, 617, 614, 672, 673, 689. Villa Carolina. 500 m.

"Trapped among fallen trees." "Lives in hollow tree-

trunks."—E. B.

These specimens again show that the presence or absence of slate-grey at the bases of the belly-hairs is in this group a character of no importance, all conditions occurring in the series.

None of these examples have feet quite as long as in the

^{*} Eligmodontia laucha musculina, Thos. Ann. & Mag. Nat. Hist. (8) xi. p. 138 (1913).

type, but that is a very old specimen. Their bullæ are all smaller than in the type of G. cachinus, and about the same as in G. lockwoodi.

11. Akodon simulator, Thos.

3. 545, 550, 551, 555, 557, 560, 568, 570, 571, 574, 576, 593, 596, 603, 605, 608; \$\phi\$. 552, 558, 559, 569, 575, 581, 588, 590, 591, 594, 609. Jujuy. 1258 m.

8. 620, 632, 650, 658, 660, 662; 9. 612, 641. Villa

Carolina. 500 m.

This fine series, of all ages, shows, firstly, that A. simulator is much more hypsodont than ordinary Akodons of the arenicola group, being, in fact, intermediate between the latter and the extremely hypsodont Hypsimys. And the same is no doubt the case with the other large Akodons of the present group, most of which are known only by more insufficient material, often with greatly worn teeth. Degrees of hypsodontism are always very difficult to judge without specimens of many different ages; so that this series is of special value.

Secondly, I would note that A. simulator proves to be more variable in colour than usual, some specimens being, like the original set, grey anteriorly and buffy posteriorly, others with the buffy covering the whole body, and others, again, nearly uniformly brown. These differences are not local, and no

corresponding differences can be found in the skulls.

12. Akodon sp. (near A. dolores).

(Villa Carolina.)

A skin (no. 656) from Villa Carolina, which appears to be quite indistinguishable from *Hesperomys venustus*, has assigned to it, but I feel sure wrongly, a skull showing a very close resemblance to that of the Cordova Akodon dolores, an animal with no external similarity to the Hesperomys, and belonging to yet another group of Akodon. No skin in the collection seems suitable for this skull, which must remain undetermined until further collections are made. A. dolores is not specially hypsodont, as are A. simulator and canosus, nor are the incisors proodont, as is the case with A. lactens and orbus, from Leon, Jujny, and Otro Cerro, Catamarca, respectively.

13. Akodon carnosus, Thos.

З. 580, 585, 589, 592, 595, 606; 9. 565, 566, **583**. Јијиу. 1258 m. This Akodon was originally described as a subspecies of A. puer, but is shown by better material to have a somewhat larger skull with more angular supraorbital edges, and to be distinctly more hypsodont than that animal—in fact, as much so as in the large A. simulator: I therefore recognize it as specifically distinct.

A complete male skull has a greatest length of 25.5 mm.;

condylo-incisive length 23.2.

14. Ctenomys sylvanus utibilis, subsp. n.

9. 713, 715. Yuto, Rio San Francisco. Alt. 500 m.

"Found among woods; sandy soil."—E. B.

Size and general characters of true sylvanus, but lighter

and with white patches on under surface.

Colour above near "snuff-brown," but rather darker, the median dorsal line blackened in the paratype, but not so in the type. Under surface in general scarcely lighter, but in both specimens there are well-marked axillary white spots and conspicuous inguinal patches. Sides of muzzle scarcely blackened. Hands, feet, and tail more hairy than in sylvanus, less than in budini, the hands and feet white, the tail blackish for its proximal two-thirds, then white.

Skull about as in sylvanus, but in the available specimens the interparietals are larger, about equalling those of budini, and the palatal notch ends opposite the middle instead of the

front edge of m^2 .

Dimensions of the type:—

Head and body 190 mm.; tail 65; hind foot 34.5.

Skull: median length 45.7; condylo-incisive length 45; zygomatic breadth 28.7; nasals 16.2 × 7.8; interorbital breadth 10.2; breadth across brain-case 19.5; bimeatal breadth 28.5; palatilar length 20.3; dental length 26; upper tooth-series (crowns) 9.8.

Type. Adult, but not old, female. B.M. no. 20. 1. 7. 114.

Original number 715. Collected 24th July, 1919.

This tuco-tuco would seem to be a less saturate form than true sylvanus, inhabiting more open woods, with the soil "arenoso" instead of "vegetal"—sand instead of humus. Its general tone is rather lighter, its muzzle is conspicuously so, while its prominent white axillary and inguinal patches afford the most obvious means of distinction, as there are none at all in sylvanus. Both forms are no doubt nearly allied to budini, but from that the distinction of utibilis in ground-colour, and especially in that of the lower surface, is markedly greater. Both sylvanus and utibilis occur at about 500 m., while budini comes from 2600 m.

15. Ctenomys juris, sp. n.

3. 703, 706; 2. 702, 704, 705. El Chaguaral, between San Pedro and Villa Carolina. Alt. 500 m.

"In stony ground in ravines running down to the river."

-E. B.

A small species like C. fochi externally, but with much smaller bullæ.

Size small, about as in bergi, fochi, and dorsalis. General colour usually quite uniform pale brown, nearest to "sayal brown" along the back, paler on the sides. Under surface washed with pale buffy varying towards whitish, the best-marked specimens near "pinkish buff." Middle line of face normally little darker than back, but in two out of five specimens there is a marked darkening on the top of the muzzle, as in fochi. Size of neck with a buffy or whitish half-collar extending up to the ear. Inner side of forearm whitish, lighter than the belly; concolor with the belly in fochi. Hands and feet whitish. Tail dull buffy whitish, with a dark brown terminal crest.

Skull with broad nasals, little narrowed posteriorly. Zygomata widely expanded, the anterior zygomatic breadth often greater than the posterior. Palatal notch to level of middle of m^2 . Bullæ small and narrow, but smoothly filled out, not compressed; markedly smaller than in fochi.

Incisors rather more proodont than usual, the index-angle about 108°, in the type of bergi 100°, in that of fochi 94°.

Dimensions of the type :-

Head and body 177 mm.; tail 72; hind foot 29.

Skull: median length 42; condylo-incisive length 42·3; zygomatic breadth (anterior) 27; nasals $13·2 \times 7·5$; interorbital breadth 10; breadth across brain-case 17; bimeatal breadth 27; palatilar length 19·7; dental length 25; upper tooth-series (crowns) 8·3.

Type. Adult male. B.M. no. 20. 1. 7. 116. Original

number 706. Collected 3rd August, 1919.

The smaller bullæ and usually undarkened forehead will readily distinguish this tuco-tuco from its nearest ally C. fochi

of Chumbicha, Catamarca.

Sr. Budin has taken great pains in getting tuco-tucos, making excursions in various directions to obtain them, and is now rewarded by the discovery of two further new forms. None appear to be found at Villa Carolina, or very close to the town of Jujuy.

16. Dasyprocta variegata boliviæ, Thos. Immature skull. 3. Villa Carolina. 500 m.

17. Galea comes, Thos.

♂. 635, 666, 670, 691, 708; ♀. 643, 657, 661, 664, 696, 700, 701. Villa Carolina. 1258 m.

18. Sylvilagus brasiliensis gibsoni, Thos.

3.690. Villa Carolina. 500 m. Not fully adult. Nape-patch less rufous than in type.

19. Marmosa * budini, sp. n.

3.714. Altura de Yuto, Rio San Francisco. Alt. 500 m.

"Caught in an upland wood."—E. B.

A medium-sized species, grey above and buffy yellowish below.

* I am quite unable to accept the nomenclatural results of Dr. Matschie's recent paper on the Didelphiidæ (SB. Ges. Nat. Fr. Berl. 1916, p. 259), because, as in other cases, he bases his whole work on the obsolete and now generally discarded principle of elimination, instead of using modern methods for the identification and selection of genotypes. Some of his conclusions in the present case would be specially unacceptable to workers in general, such as his entire ignoring of my selection in 1888 of brachyurus as the type of Peramys, Less., and his long and complicated arguments that because the other species of the original Peramys—brachyurus, tristriata, and pusilla—fall into other genera, the fourth species mentioned—crassicaudata—must be taken as the genotype. Such a definite selection of the genotype of Peramys (brachyura) as that in the 'Catalogue of Marsupials' is in accordance with modern usage and cannot be ignored.

With regard, however, to Monodelphis, Burm., although Dr. Matschie's selection of its genotype is obtained, as I consider, in the wrong way, yet he has made a selection, and, in the absence of an earlier one, that would be valid, and I would therefore accept "brachynra" as its genotype. In consequence Monodelphis would antedate and supersede Peramys for the genus containing the common short-tailed opossum.

All Dr. Matschie's recent nomenclature work is similarly based on this unsound principle of elimination, so that his exceptional literary knowledge is rendered nugatory so far as the utilization of his results is concerned.

Incidentally I may note that the group called *Micourcus* by Matschie, who quotes its type as *D. laniger*, Desm., appears to need a new name, as *Micourcus*, Lesson, with type by subsequent selection *D. cinerea* (Thomas, 1888), properly goes to quite a different group. I would suggest the name *Mallodelphys* for the former, with *D. laniger* as its genotype. It should, I think, rank as a subgenus of the genus *Philander*, whose genotype, by tautonymy, is *Philander philander*, L.

Size about as in M. murina. Fur soft and fine, of medium length, hairs of back about 12 mm. long. General colonr above rather browner than Ridgway's "light greyish olive"; sides lighter and more buffy; under surface rich buffy, the median area of throat and belly "light ochraceous buff," this colonr also extending up, though less intense, on the outer sides of the hips. Top of muzzle dull buffy, cheeks rich buffy; black orbital rings well marked. Upper surface of hands and feet pale buffy; fifth hind digit about equal in length to the second; third longer and fourth longest. Tail with only about a centimetre at its base furry and coloured like the body; the rest naked, grey for its proximal half above and third below; the end white all round.

Skull of normal proportions; nasals expanded behind; supraorbital ledges well developed. Palatal imperfections of

average extent.

Teeth rather large in proportion to the size of the skull. P^1 small, p^2 and p^3 much larger, subequal.

Dimensions of the type:

Head and body 139 mm.; tail 186; hind foot 24.5; ear 22.4.

Skull: greatest length 38; condylo-basal length 37; zygo-matic breadth 21.5; nasals, length 16.5, middle breadth 2.7, greatest breadth 5; breadth across postorbital processes 8.8; palatal length 21; length of maxillary tooth-row 15.7; first three molariform teeth 7.1.

Hab. as above. Yuto is about 70 kilometres north of

Villa Carolina.

Type. Male, adult but not old. B.M. no. 20. 1. 7. 134.

Original number 714. Collected 23rd July, 1919.

While of about the size of the members of the Marmosa murina group, and with similarly unfurred tail-base, this opossum has the greyish colour and yellowish belly of M. cinerea and its allies, and is thus readily distinguishable from any species as yet described. It is the first member of the group to be found in Argentine territory.

The species is named after Sr. Budin, in recognition of the keen and intelligent interest he takes in his collecting work.

20. Marmosa elegans cinderella, Thos.

д. 554, 562, 563; 2. 549, 561. Jujny. 1258 m.

3. 683, 693, 710. Villa Carolina. 500 m.